

of fairly modern design, but the wall plaster was badly cracked and huge flakes of old paint threatened to fall from the ceiling. The x-ray equipment was all antiquated and it was impossible to get replacements for worn parts.

As we walked down the stairs, we noticed that all the metal treads had been removed from the edges of the terrazzo steps. When I inquired about the reason for this, the professor smiled and said quite slowly, "They went into our last big scrap drive—over a year ago!"

Japan, December 3, 1945.

CLINICAL NOTES AND CASE REPORTS

FOOT STRAIN: A VALUABLE SIGN

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THE following is a simple test for the diagnosis of foot strain. Although the sign is well known among orthopedists, other practitioners are generally not familiar with it. Tenderness is felt over the center of the medial border of the longitudinal arch. If pain is present on moderate pressure here a diagnosis of foot strain can usually be made.

It may seem presumptuous to mention so simple a test. The clinical value of the sign has nevertheless not been sufficiently emphasized. The diagnosis of foot strain is often difficult to make. Indeed it is frequently made by exclusion. The examiner eliminates the possibility of peripheral vascular disease, of inflammatory disease and of trauma, and thus static strain is left as the cause of the patient's painful feet. It is evident that if a positive sign for the diagnosis of foot strain could be made rather than a diagnosis by exclusion we would have a more conclusive diagnosis. The presence of valgus deformity of the foot is itself insufficient evidence for a diagnosis of foot strain. Anyone who has examined many human feet has noted many flat feet that caused no symptoms. Therefore, a patient may have flat feet, yet the pain in his feet is not necessarily a result of the deformity. Furthermore, he may have pain in his legs or pain in his back without any pain directly in his foot, and yet all his symptoms may be caused by foot strain. What is the cause of this tenderness in the center of the inner border of the foot? In this area the tendons of

insertion of both the Tibialis Anticus and of Tibialis Posticus are very superficial. On dissection of the insertions of these two tendons one will find the tendoos-seaus junction surrounded by thin connective tissue having the appearance of a bursa. This filmy connective tissue is both superficial to and deep to the tendinous insertion, and it is probable that this tissue undergoes slight non-specific inflammatory changes. Why should there be irritation at the insertion of these two tendons, the Tibialis Anticus and Tibialis Posticus? Because the entire weight of the body with each step stretches the tendinous insertion. Because the tendons can be easily pressed and irritated between the tarsus and the shoe. (Illustrations of cross sections of the tarsus, appearing in volumes on anatomy, show the superficial position of the tendons of the tibialis anterioris and posterioris.)

The feet of twenty individuals were used as controls. These twenty adults had no complaints referable to their extremities or to their back. In none of these twenty people was any tenderness present on pressure over the medial border of the foot.

SUMMARY

A simple test for foot strain is emphasized. It consists of point tenderness over the center of the inner border of the tarsal area.

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OBSCURE LYMPHOSARCOMA

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THIS case is reported not only because it seems to offer a fair opportunity to correlate changes in the differential blood count with the x-ray therapy administered but also to raise a question concerning therapeutic procedure under similar circumstances.

REPORT OF CASE

A white female of 53 years, presented herself with multiple nodular swellings in the neck, axillae and groins and a complaint of generalized abdominal pain and swelling which followed a fall on the abdomen two months previously. She had lost 20 pounds during this two months. She was found to have a left post-pharyngeal swelling, generalized discrete lymphadenopathy and a palpable tender spleen. The lymph nodes were only moderately enlarged. The initial blood count showed 10,150 WBC with 64 per cent lymphocytes, equivalent to about 6,500 lymphocytes per cu. mm. Normally with a 10,000 cell count and a maximum of 35 per cent lymphocytes we would see that 3,500 would be about the high level of normal. Thus her circulating lymphocytes were not quite double the figure but no immature forms were recognized.

An inguinal node was removed for study and findings reported "compatible with leukemic lymphadenosis but they do not warrant a diagnosis of lymphosarcoma."

X-ray therapy was given on the basis of the tissue diagnosis, treating the spleen, both sides of the neck, both axillae and both groins in a system of rotation. Five days after 100 r over the spleen the circulating lymphocytes had dropped from 6,500 to 1,600 per cu. mm.—a rather dramatic change. Four days later, however, this low figure had more than doubled to 3,535 per cu. mm., but at no time subsequently did it ever significantly exceed this figure.

During the first four months a total of 1,500 r were given, 300 r of this over the spleen. At four and one-half months a sudden reversal in the differential count occurred. Nine counts during the initial period had shown an average of 60 per cent of the circulating white blood cells to be lymphocytes. Fourteen counts during the next year and one-half showed an average of only 33 per cent. At one time a year after treatment was instituted the treated glands had disappeared and the intern who saw the patient in good condition in the clinic recorded that

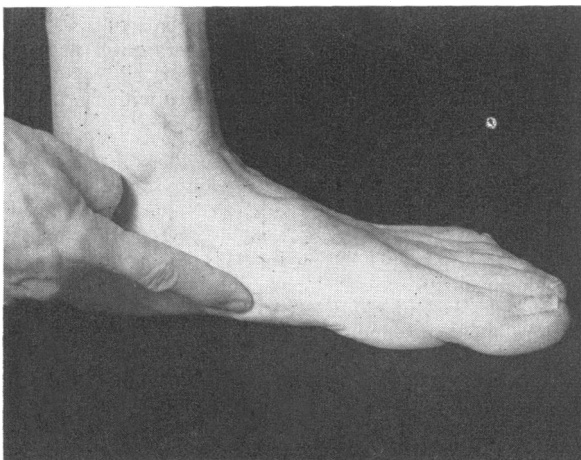


Fig. 1.—Palpation for tenderness to determine presence of strain.